

Having thus described the preferred embodiments, the invention is now claimed to be:

1. A golf ball comprising:
a core having one or more layers; and
5 one or more high-density regions interiorly disposed along a common plane in at least one of the core layers of the golf ball and centered about the horizontal spin axis of the ball.
2. The golf ball of claim 1, wherein the one or more high-density regions comprise a continuous or discontinuous band of high-density material
10 positioned along the gyroscopic center plane of the golf ball.
3. The golf ball of claim 2, wherein the band is disposed in the outer layer of the core along a longitudinal axis which is perpendicular to the ball's spin axis.
4. The golf ball of claim 2, wherein said band comprises two or
15 more equally segmented parts radially disposed along a common plane.
5. The golf ball of claim 1, wherein the cover is formed from a material selected from a translucent or transparent cover material, and further wherein the high-density regions are visible to a golfer through said cover.
6. The golf ball of claim 1, wherein the high-density regions are
20 not visible to a golfer through the cover, the cover further comprising one or more markings, said markings providing a visible indicia of at least one of: (i) the gyroscopic center plane of the ball; and (2) a spin axis of the ball, the spin axis being perpendicular to the center plane and passing through a center of the ball.
7. The golf ball of claim 2, wherein said band comprises three
25 or more equally segmented parts radially disposed along a common plane.

8. The golf ball of claim 2, wherein the band comprises from 2 to 12 equally spaced segments.

9. The golf ball of claim 8, wherein the segments comprise high-density members which are radially equally spaced apart about a spin axis of the 5 golf ball, and wherein each segment is located within the golf ball an equal distance from the spin axis.

10. The golf ball of claim 2, wherein said band comprises five or more equally segmented parts radially disposed along a common plane and equal distance from the spin axis;

10 the cover comprises one or more cover layers; and

the one or more high-density regions comprise at least one continuous or discontinuous band of high-density material formed in at least one core layer.

11. A golf ball comprising:

15 a core, said core defining at least one hollow channel extending around the longitudinal axis of the core perpendicular to the ball's spin axis; and at least one high-density region disposed in said hollow channel.

12. The golf ball of claim 11, wherein the high density region has a density of 1.2 or more.

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13. The golf ball of claim 11, wherein said high density region comprises a density-adjusting filler.

14. The golf ball of claim 11, wherein said high density region comprises a continuous or discontinuous band of high density material.

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15. The golf ball of claim 14, wherein the band comprises two or

more equally segmented parts radially disposed along a common plane.

16. The golf ball of claim 11, wherein the core comprises a multi-layer core.

17. The golf ball of claim 11, wherein the high density region
5 comprises a continuous metal band having a density of greater than 1.2.

18. The golf ball of claim 11, wherein the high density region
comprises a continuous band of metallic material comprising brass, steel, copper,
iron, tungsten, bronze, nickel, stainless steel, titanium, aluminum and molybdenum.

19. A golf ball having a controlled weight distribution about the
10 ball's horizontal spin axis comprising:

a core having a high density region interiorly disposed within the
extension perimeter of the core along the ball's gyroscopic center plane and about
the ball's spin axis.

15 20. The golf ball of claim 19, wherein said high density region of
said core defines a channel disposed on the longitudinal axis of the exterior
perimeter of the core and about the spin axis of the ball; and
further comprising a cover enclosing the core.